WHIRRAKEE

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MONTHLY NEWSLETTER OF THE BENDIGO

FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.

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Treasurer	Ben Goonan	
Membership Officer	Anne Bridley	5442 6188
Excursion organiser	*position vacant*	
Syllabus organiser	Ben Goonan	
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Whirrakee mailing coordinator	Rod Orr	5443 5668

Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $34; Family $40; Concession: Single $28.50; Family $34. *Whirrakee* subscription only is $34.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. The meeting starts with a 10 minute thing-of-the night natural history segment. The invited speaker starts at 8:00pm and meetings conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 6:00pm. Members of the Committee are the Office Bearer listed above and the following members: Anne Bridley, Glenise Moors, Joy Clusker, Kerrie Norris, John Lindner.

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Several interclub field naturalist campouts are held every year.

The Bendigo Field Naturalists Club has one sub-group (the Fauna Study Group) and is actively involved in local conservation issues. An **indigenous garden** has been established around the Golden Square Senior Citizens Building. Working bees are advertised on the *Whirrakee* diary page.

Fauna Study Group: Chairman: John Burtonclay, Fadersons Lane, Mandurang (5439 5710)
Secretary: Bill Holsworth, 13 Nabilla Crs., Bendigo (5443 4063)
Equipment Officer: Maurie Lewis (0407 427179)
Regular fauna excursions take place most Fridays. See page 11 for details.

Bird Observing: Club members conduct regular bird surveys. Please contact Anne Bridley 5442 6188 or Glenise Moors 5439 6254 for details. Special bird observations should be reported to Anne Bridley 5442 6188.
To propose bird observing excursions please contact Kerrie Norris 5447 8017.

Front cover photo?...see page 2

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club

Vol. 32, No. 11, December 2011

Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*) which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions will be included as soon as possible after they are received, although articles received more than one week after the monthly General Meeting will probably be too late for inclusion in the next issue of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editor's Note
Spring is not letting go just yet, and we are still experiencing showers and cool temperatures. This means lots of good walking time in the bush, which is still nice and studded with Sweet Bursaria, daisies and the purple Finger Flower and Magenta Storksbill. I hope most of you find the time to enjoy such activities, and also to come to our end-of-year breakup and/or to the Hall Clean up on the 17th. There is no meeting in January, but an interesting talk about cane toads has already been advertised for February, see back page. I wish everybody a safe and happy summer.

Front page photograph: **Joy Clusker** found this deserted , rather fungi-like bee-hive on the side of the Law courts building in Pall Mall.
Editor's note: Such striking symmetries – I know that nature is wonderful enough without doing tricks with it, but I could not help playing around a bit with this one and double up on Joy's photo. Apologies if this offends anybody, especially Joy.

Short Notices

December meeting
With this month's 'Memory Lane' presentations, please be reminded that we are still able to show (pre-digital) photographic slides as well as digital photos. Both systems could easily be set up and ready to go no matter (much) how their memories are stored.

Membership Renewal
If your *Whirrakee* has a red dot this month, it means we do not have a record of your payment of your membership fee for the 2011/12 financial year. If you wish to continue to receive *Whirrakee*, please pay by December 31. If you have already paid, please ignore the notice.

Correction to the report on Carol Hall's Spitsbergen visit, in November *Whirrakee*
Editor's comment: Unfortunately I got some facts and direction in Carol's talk mixed up, but luckily she spotted the mistakes. Below are the corrected sentences. My sincere apologies, this was my fault, not Carol's.

a) in the first paragraph the following is correct:
In Spitsbergen, cold currents from the polar circulation flowing past the EASTERLY coastlines make it extremely cold there, while the warm current coming up from the Gulf Stream causes a milder current on the WEST side.

b) It is estimated that the Svalbard region is home to 2500-3000 polar bears and an estimate of the total number in the Arctic as a whole is 25,000-30,000.

c) Carol travelled on the 'Polar Pioneer" .....and visited ONE of only two Inuit settlements along the EAST coast (the COLDER coast).

Common Mynahs in Bendigo
Bendigo resident Bernard Cannon is interested in doing something about the increased number of Common Mynahs in Bendigo. If any club members would like to help him with this, he can be contacted on 5441 6680.

November Notes and Observations
compiled by Rod Orr

Matt Comer heard a Koel near Golden Square at about 8 pm (8th Nov). Just a faint call in the distance.

Glenise Moors reported that a male Leaden Flycatcher spent a day on their block. It was seen there again on Oct. 27th. This species usually stays in the Greater Bendigo National Park nearby and has nested there for a number of years.

On October 23rd, 2 Sugar Gliders were seen in the box, which Glenise had cleaned out 2 weeks before. The debris had filled the box but she left just a few old greenish leaves. The gliders were seen to be snuggled into some fresh green leaves. The same day when she cleaned out the box, she had investigated another box, which had been taken over by honeybees. This box was filled with old combs but 2 Sugar Gliders could be seen in the bottom. She was not surprised to find that Sugar Gliders had moved back into the cleaned nest box.

Anne Bridley reported on Garden Skinks fighting at Spring Gully. She first saw 2 of these skinks locked together, writhing, twisting & turning, sometimes upside down and exposing their white bellies. One had the other's snout grasped firmly in its jaws. Over the next 5 to 10 minutes, 3 other skinks tried to join in. One succeeded, leading to a knot of 3 writhing skinks. When the 2 skinks weren't gripping each other they adopted a very aggressive looking threat posture with their front parts raised high and their chins lowered towards their chests.

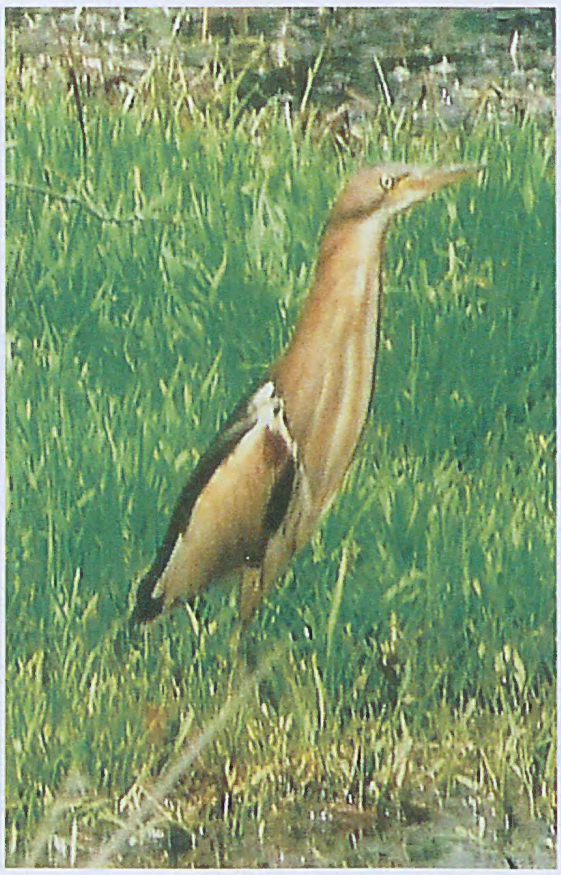
continued on page 8...

Plant-Animal interactions on a grand scale (Photographer: Jan Orr)
(devastating for some, and fanatstic for others)

Jan and Rod visited the Kooyoora National Park a week or so ago, and on the way there, they were amazed to see large areas of the Box-Ironbark forest in the sorry state illustrated by the photographs Of course, they stopped and wandered around looking for clues - these are illustrated by the blistered leaves in Rod's hand below. Many of the trees were completely defoliated with all of their blistered leaves covering the ground beneath. The photos also show signs of new leaves appearing after this massive insect attack. It will be interesting to see what happens next! Rod hasn't started to search yet, for the ID of the culprit but will try to do this soon.

Unusual birds in suburban Bendigo

Sacred Kingfisher, 30th October, Flora Hill photographed by Caitlyn Lehman. There have been a few sightings of these kingfishers in the district of late, but usually not on suburban clothelines!



Little Bitterns at Lake Tom Thumb

Photographers:
Lance Costin (left)
Joy Clusker (right and top). See story by Ray Wallace on page 9.

The treasures of Mt Hope Photographer: Joy Clusker

↑ The liverwort *Riccia limbata*, found in dry habitats on Mt Hope, emerged in prominent patches after rain

Jewel bug, Family Scutelleridae

A hatch of Jewel bugs ↑

Rock Isotome after rain ➔

More local treasures...

Jan and Rod were looking for flowering plants and birds in the north-eastern part of the Wellsford Forest a couple of weeks ago. Rod didn't find the flowering plants that he wanted to see, but the numerous *Calytrix tetragona* plants in one of the sandy areas were still very attractive even though the petals had all fallen from the spent flowers. The sepals were very colourful, varying from pale pink through to very dark red and some were even close to a shining black. Of course, the closer you look in any of our surrounding forests and woodlands, the more native fauna you'll find amongst the vegetation. This beautiful spider was a surprise to Rod though, because he wouldn't have started looking for them until January when the Hyacinth Orchids start to flower in the forests South of Bendigo. The more closely he has looked, the more of these interesting spiders he has found on visits to the Whipstick, Kamarooka & Wellsford forests during October and November.

↑ Enamel Spider on *Calytrix tetragona*
(Photographer: Rod Orr)

← *Gompholobium* sp., Common wedge pea
Mandurang, October (Photo by Joy Clusker)
This photo shows very clearly how such a flower must be 'worked' by its pollinators. The pale yellow landing platform is quite convenient for insect to land on, and as long as they are heavy enough to depress the keel underneath, their belly is dusted with pollen. Under UV light, the bright yellow patch is likely to have some directional markings to help orientate the potential pollinator (which might be a native bee).

...November observations continued

The *Frogs and Reptiles of Bendigo* states that knots of up to 18 skinks have been seen, which must have been some sight.

Rod Orr showed several specimens of interesting local plants which are easily overlooked, mostly when they are not flowering, although they are not always easy to find even when in flower, and most of them are very localised - *Astrotricha linearis* ssp.1, *Pomaderris paniculosa* ssp. *paniculosa*, *Myoporum montanum*, *Olearia decurrens* & *Crowea exalata* ssp. *revoluta*

The *Astrotricha* and the *Pomaderris* had just finished flowering, the *Myoporum* and the *Crowea* were still flowering, but *Olearia decurrens* flowers much later during Summer when we tend to be sheltering from the heat, rather than searching for flowering plants in our bushland.

Several of these species are fire-sensitive and need to be mapped, so that they can be protected and not be depleted, or even destroyed, by fires intended as 'Fuel Reduction burns'.

The remaining specimen was of an introduced 'weed' orchid, *Disa bracteata*, which had been found growing at Elphinstone in a small but very interesting roadside reserve. This is an unfortunate and unwelcome discovery because this orchid produces large quantities of seed, is very invasive and spreads rapidly - not good news for this roadside remnant!

Some additional observations (not recorded at the meeting)

Caitlyn Lehman
Having never seen a kingfisher properly before, I was absolutely thrilled when this one appeared on our neighbour's clothesline (checking out dinner scraps that our neighbour throws out – a habit we wish he would stop, but obviously we got to see the kingfisher because of it!). Full credit must go to my mum, Jennifer, for spotting the bird! Luckily the kingfisher stayed long enough for me to race for my glasses and then for the camera (see page 5 for the photo)

The kingfisher appeared on 30 October (fitting perfectly with the local field guide notes for this species). The location was Curtin Street, Flora Hill.

Heather Roberts
These observations are from Glenise Moor's sister, who lives beside the Loddon River at Eddington. In the first week of November she observed two Dollarbirds and an adult Nankeen Night-heron. Both species have been absent for at least three years. A group of six White-browed Babblers came to check out her yard, where they nested for many years and two Diamond Firetails came to feed beside the road and inspect the old babblers' nests. Two Sacred Kingfishers came to dive for small frogs in the disused in-ground pool.

Tom Burton
Tom, who lives in Rowville, Melbourne, was going to send a picture of his *Dianella tarda* because the flower stalks are well over 2m tall. However they were unable to support themselves any longer, so have grown sideways now, making a hopeless photo. They are flowering profusely, better that their parent plants in Mandurang.

New Name Badges
New name badges are now available for purchase from:
Bendigo Graphics, 176 Lyttleton Terrace
The new design features the club name and a coloured illustration of a sprig of Fairy Wax-flower, *Philotheca verrucosa,* the club emblem. Your name will be clearly written in large print.
Members have a choice of finish to the badge;
Plain @ $11:00 or Domed @ $16:50
So, old members (most of us can truthfully be described as 'old') please find your old badge (if you can) or save up and get a 'snazzy' new one. And new members don't be left out, Bendigo Graphics is easy to find. It's next to the gun shop in the same row of shops as Autobarn in Lyttleton Terrace.

A Little Bittern visits Lake Tom Thumb

by Ray Wallace

The last week of October 2011 and early November saw a Little Bittern take up residence at urban Lake Tom Thumb in Eaglehawk. Although an urban wetland, the south-west corner of the lake is a small area of choice waterbird habitat with a dense cover of Cumbungi and native and exotic rushes. Varying water depths and mudflats provide feeding areas for a number of species.

I first noticed the solitary bird one evening at late dusk , and even though the light was poor its behavior was typically that of a Bittern, freezing and elongating itself in an upright stance with bill pointing skyward .
Next day, in good light, I confirmed my fairly strong supposition .

The following day I took Ken Stent and Joy Clusker down to successfully observe what is certainly a rarity for the district, having only been recorded twice in the Bendigo region before.
The same day, I informed Lance Costin the bird was present . Both Joy and Lance took some very good photographs of the bird in very different postures (see page 5).

Obligingly, for such cryptic shy species it often emerged to feed in the open and subsequently a number of observers availed themselves of the chance, like the author , to observe their first Bittern of any species.

Rather than go into a long involved description of the species I would refer you to the illustrations in the field guides by Michael Morcombe and the Slaters. Although I am an admirer of Simpson and Day. their illustration is far too chestnut.

As well as the pleasure of the Little Bittern, the same corner is still home for Baillons Crake, Australian Crake , Buff-banded Rail and Black – tailed Native hen. Altogether well worth a visit for an hour or two even though the Little Bittern appears to have moved on . Subsequent to this I mentioned this record to Ian Fenselau who informed me there had been a reliable sighting at White Hills a week prior

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November General Meeting – Speaker: Jeff Jeanes 'The National Seed Bank Project'

by Sabine Wilkens

The depressing statistics about land clearance and deforestation in Australia, must result in several-pronged approaches to conserve flora and fauna that inhabit those threatened and fragmented natural land areas. One is to fight the decisions that are being made, and a parallel one is to look at other ways to conserve the inhabitants. One of these 'other' ways is to preserve seeds of all our plant species. In fact, 'seed-banking' is a long-term and low cost strategy and is being undertaken by the Millenium Seed Bank since 2000.

The ambitious milestone to bank 10% of the world's dry land flora by 2010 has been reached, with the next goal of 25% being banked by 2020. Fifty countries from all over the world are involved in working for the Millenium Seed Bank, which is centred around Wakehurst Place, south of London, in the United Kingdom. Here, the Kew Botanic Gardens acquired property to house the seed bank, which is a futuristic series of buildings that are designed to withstand severe natural and human caused catastrophes.

Jeff Jeanes is the coordinator of the Victorian Conservation Seedbank (VCS) Project, which runs from the National Herbarium in partnership with Kew Gardens. The project's condition is to supply the Royal Botanic Gardens in Kew (RBGK) with seeds of Victorian species, including documentation and experimental results on viability, germination, storage etc.. To date more than 1000 Victorian species have been banked and sent to Kew.

The project has faced major difficulties since it started, as Victoria has experienced a severe drought, bushfires and floods in the last decade. Some species of plants have not been seen for decades (or worse), so much time is spent trying to locate isolated populations. Jeff showed us images of some of his target species, all of which are rare, vulnerable and endangered (and I believe he has been out tracking some of them with Rod near Bendigo recently).

Simply finding a rare plant is not enough though, each shipment to Kew requires a minimum of 4000 seeds, sampled across the population, with two or more pressed voucher specimens (these must be in flower, so might need to be collected at a different time than the seeds), date, collector's name and GPS location, with detailed notes on the habitat, soil, aspect, and associated plants. All this will help re-introduce the species into the wild, if ever needed.

Seeds that are easy to preserve and store are called 'orthodox' seeds. They are small, can withstand desiccation and freezing, while the so-called 'unorthodox' seeds are usually big and cannot be frozen, and thus present a problem for keeping safe for any length of time. Seeds of Victorian plants range between both extremes, so finding the right treatment is a complicated job (especially when large amounts of seeds for testing is not available).

Trial and error is also involved in trying to get seeds to germinate. This usually involves finding the right conditions that break seed dormancy. Sometimes this might be wet or dry heat, smoke water or a cold treatment, whereas at other times, when the requirements are not known, germination can be achieved with gibberellic acid, a natural plant hormone, which, when applied to seeds in minute concentrations, 'tricks' the seed into germinating. Often several successive 'conditions' are required, like wet after heat or a certain temperature followed by dryness etc. In the wild, this ensures that seeds germinate in the right season, when the seedling actually has a chance to grow up and set seed itself. However what works well in nature is often hard to copy in a lab, and mostly we don't actually know what it is that gives seeds the signal that the environment is suitable.

The seed that is sent away to England, is packaged into several foil satchels. One large one for the bulk material will be kept closed indefinitely, plus several smaller ones for the occasional viability trial and in case somebody requests a sample. If anybody around the world is conducting research on a rare plant species, the seeds of which are lodged at Kew, the gardens are obliged to supply a sample. Most seeds are stored at –20°C. Ideally they will have about 5% moisture, as any more moisture will reduce their storage life.

Megan Hurst works on this side of the project, and she presented some of the issues to our members on the night. Her work begins with the cleaning and sorting of seeds, including freeing it from microbial contaminants and potential insect pests.

It is hard to realize just how much is involved, but all the information about viability, storage and germination conditions has to go to Kew along with the seeds, so progress is slow for many species.
On the positive side, once the conditions for germination have been discovered, then the resulting seedlings don't go to waste, but are planted in the Melbourne Botanic Gardens into special habitat beds, to be enjoyed by everybody.

So what of the future for the seed bank project? Currently the funding for the VCS has run out and renewed funding from Kew Gardens is uncertain. As Jeff was speaking to us, negotiations were in progress. Jeff has plans to change directions somewhat with a new focus on grassland plants, so let's hope money will be available to continue this important work.

Many thanks to Jeff and Meagan to make the trip to Bendigo, and share their interesting work with us.

Diary

All Club meetings are held at the Golden Square Senior Citizens Building, Old High St Golden Square, unless otherwise indicated.

Wednesday, December 14 6.30pm
For the December general meeting, we share a meal, to which everyone is welcome to contribute something (hence the earlier starting time). The theme of the night is "A Wander Down Memory Lane"
Members are invited to bring memorabilia for display such as photos, newspaper clippings, specimens and interesting artifacts. Members can also bring a few slides (a maximum of 10 per member). You are invited to give a brief talk (no more than 10 minutes) about your items and stories of club doings. Past members are also welcome, so if you know of any who would like to come, please invite them.

Wednesday, February 8 **7.30pm**
The first meeting of the year (there is no January meeting) will have a surprise speaker. Come and find out who it is.

The Great Big Annual BFNC Hall Clean-up
Saturday December 17th, 9:00 am - 12:00 noon

We will focus on cleaning the windows and kitchen and removing litter, spiderwebs and dust from the building.
So, come prepared with your favourite cleaning equipment and it's 'all hands to the pump'.
It is important to remember that the general cleaning of the hall is an important part of the Hall Management agreement the BFNC has with the City of Greater Bendigo. In return, the club gets free use of the hall. We hope to see you on the 17th.

Regular Fauna Excursions
Every Friday morning starting at around 9 to 9:30 the Fauna Group inspects nest boxes in the Spring Gully area. The excursions are led by Maurie Lewis, 16 Vains St. Golden Square. Phone 0407 427 179. Phone Maurie to confirm exact departure times and location. If you don't phone and go directly to Maurie's house and find nobody at the house between 9 and 9:30, then the excursion is not on.

Cane Toads and the Emma Gorge Scientific Expedition 2011
Wednesday, February 22 - 7.30pm at the BFNC club rooms in Golden Square.
The Australian Geographic Society (AGS) hosted a scientific expedition base camp within the Kimberleys to better understand the area's wildlife before the imminent arrival of cane toads. The 'hands-on' team of scientists and conservation volunteers recorded a multitude of rarely seen fauna including, birds, reptiles, butterflies and fish. Volunteer - Tony Spurling will present a selection of his photographs and explanation of his role during this biodiversity survey.

Family Nature Club November activity
Check out their 2012 activities at http://bendigofamilynatureclub.blogspot.com/
Registration:
Bendigonatureclub@gmail.com or 5443-1326

Wildlife Rescue & Information Network Inc.
W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.